

PORK:

Home Killing ❖ Cutting ❖ Curing

Bulletin 187
of the Agricultural Extension Service
Ohio State University



CONTENTS

Equipment for slaughtering hogs.....	3
Selection of hogs for slaughter.....	4
Preparation for slaughter.....	5
Killing	5
Scalding	7
Hanging the carcass.....	8
Dressing the carcass.....	8
Splitting and cutting the carcass.....	9
Cutting and boning yields of pork carcasses... .	17
Requirements for quality in pork.....	17
Curing the meat.....	18
Dry sugar cures	19
Brine or sweet pickle cures	19
Smoking cured meat.....	20
Storing cured meats in sacks.....	20
Yellow wash recipe.....	21
Preventing meat spoilage	21
Rendering lard	22
Making sausage	22
Head cheese	23
Scrapple	23

PORK:

Home Killing • Cutting • Curing

By

JOHN W. WUICHET

L. E. KUNKLE

Department of Animal Husbandry, Ohio State University



OME PORK is slaughtered on practically every farm during the winter season and most farmers consider themselves fairly proficient in this art. However, there are a number of factors which are frequently disregarded, and this neglect often results in unused, spoiled, or unpalatable meat. Satisfactory preparation of pork depends upon the quality of the hogs used, the methods of slaughter, cutting, curing, and storing. None of these items is especially difficult, but all are important, and uniform success will depend upon the observance of certain general principles.

By employing careful methods, the farmer will not only secure a more satisfactory product for home consumption, but may develop a market for pork products that will net a good return above the price of the hog on foot. This is especially true in periods of low prices for live hogs.

EQUIPMENT

Expensive or elaborate equipment is unnecessary, and most farms are already supplied with the essentials. Some less common items of equipment



Fig. 1.—Sticking the hog in prone position.

which are desirable, and which will help do the job better or in less time, are mentioned below.

A curved 6-inch skinning knife is a handy tool. It can be used for sticking, shaving, or dressing the carcass and cutting the meat. As soon as the user becomes accustomed to its shape, it will be found to cut more smoothly and easily than a straight butcher knife, although both are satisfactory.

A narrow bladed boning knife is handy in boning out meat for canning and the preparation of boneless roasts. To keep the knives sharp, an oil or

water stone and steel should be a part of the equipment. The steel is not a sharpening tool but is used to keep a sharp knife in good cutting condition.

A meat saw not less than 22 inches long is almost essential, although a good wood saw may serve the purpose.

Bell-shaped scrapers, gambrels, or singletrees with open hooks, a hog hook, axe or cleaver, and dairy thermometer are other useful pieces of small equipment.

A 50-gallon hardwood barrel makes a satisfactory scalding vat for hogs up to about 250 pounds in weight. A metal tank 6 feet long,

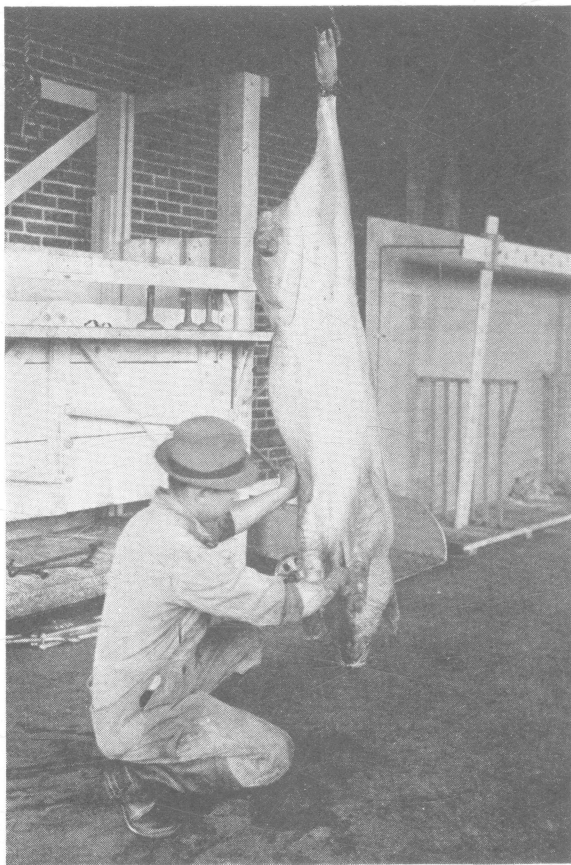


Fig. 2.—Sticking the hog in hanging position.

2½ feet wide and 2 feet deep, set up on bricks or over a trench, also makes a good scalding vat, and the water can be kept hot indefinitely.

SELECTION OF THE HOGS FOR SLAUGHTER

Use only Healthy Hogs.—Even those animals which have been merely “off feed” for a few days had better be left until the next butchering day, as the meat of hogs which are out of condition is more subject to spoilage.

Hogs weighing from 180 to 225 pounds and well finished will produce the best quality of pork and cuts of the most usable size.

Where old sows or extremely heavy hogs are used, one need not expect first quality pork. Extra large joints of meat are also hard to cure and frequently spoil. Do not use old stags for home consumption. They had best be sold on the open market.

PREPARATION FOR SLAUGHTER

Do not feed the hogs for 24 hours before killing, but give them all the water they want. In other words, if the hogs are to be killed in the morning do not feed them the evening before. Fasted hogs will dress more easily and will bleed out more satisfactorily.

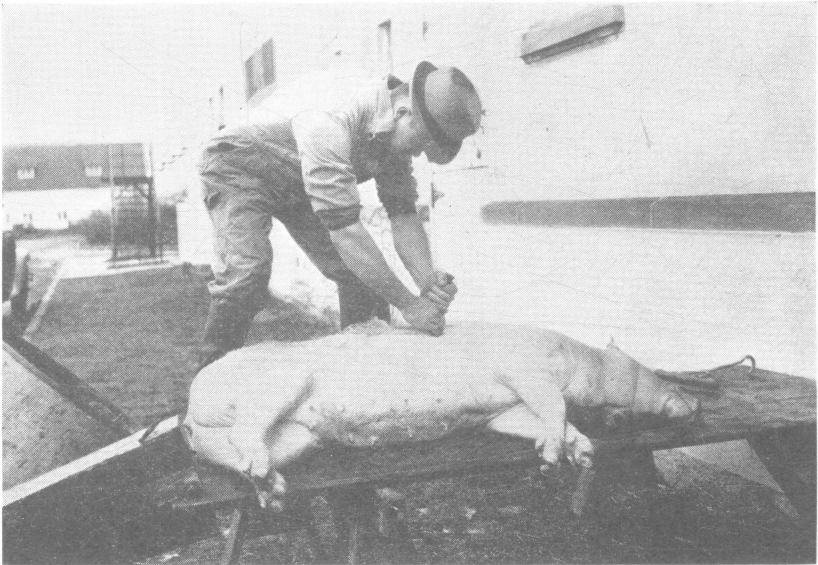


Fig. 3.—Scraping.

Do not excite or overheat the hogs any more than necessary before sticking. Both will have a tendency to retard bleeding, which will result in giving the meat a too reddish appearance, and such meat spoils easily. In order to minimize bruising, it is well to confine the hogs to be slaughtered in pens separate from the other hogs several days before slaughter.

KILLING

More thorough bleeding will result if the hogs are NOT stunned before sticking, and anything which facilitates bleeding increases the keeping qualities of the meat. However, if the hogs are wild or very large, it may be necessary to stun them before sticking. A regular straight blade sticking knife, skinning knife, or ordinary butcher knife may be used for this purpose.

Roll the hog squarely on its back, with one man astraddle holding the forelegs. Do not try to hold the hind legs. The sticker should bear down on the point of the chin and make a short incision in front of the breastbone (see Fig. 1). The point of the knife is then slipped under the point of the breastbone, severing the jugular vein, the cut being made downward and forward.



Fig. 4.—Splitting the breast bone with a knife.

Be careful not to push backward on the knife; there is danger of puncturing the diaphragm, which will make bleeding difficult.

Keep the knife squarely centered or a "shoulder stick" may result. It is unwise to stick the heart. Let it pump out the blood as long as possible.

Where a small block and tackle is available, bleeding may be still further facilitated by stringing the hog up by one hind leg and proceeding with the sticking as indicated above (see Fig. 2).

SCALDING

Where a scalding vessel is used which will take only part of the hog at a time, it is generally recommended that the rear end be scalded first, because, if the temperature of the water is not right, it is easier to shave the hams than the head (see cover page).

Others like to scald the head first, because, as the water cools while scalding the rear end, the temperatures may not be high enough to secure a good scald on the head.

However, if the water temperature is kept close to 150 degrees Fahrenheit, it will make little difference which end is scalded first. A dairy thermometer will come in handy in checking water temperatures, and will soon pay for itself in time saved and the quality of the job done.

The addition of 1 pint of lime to scalding water makes scraping easier, but prevents any cleansing action. Two tablespoons of lye to 50 gallons of water may be used with good results. Wood ashes and soap may be used in appropriate quantities as substitutes for lye, with good results so far as cleaning the skin is concerned, but the hair becomes slippery and makes scraping more difficult (see Fig. 3).

The maintenance of proper temperature is more essential for good "scalds" than the use of these materials.

Scrape one end before scalding the other, because the hair slips more easily while hot. If a horizontal scalding vat is used, where the whole hog is immersed at one time, begin scraping at the head and work toward the rear. In any case, the hair loosens more readily when scraping with the direction of the hair rather than against it.

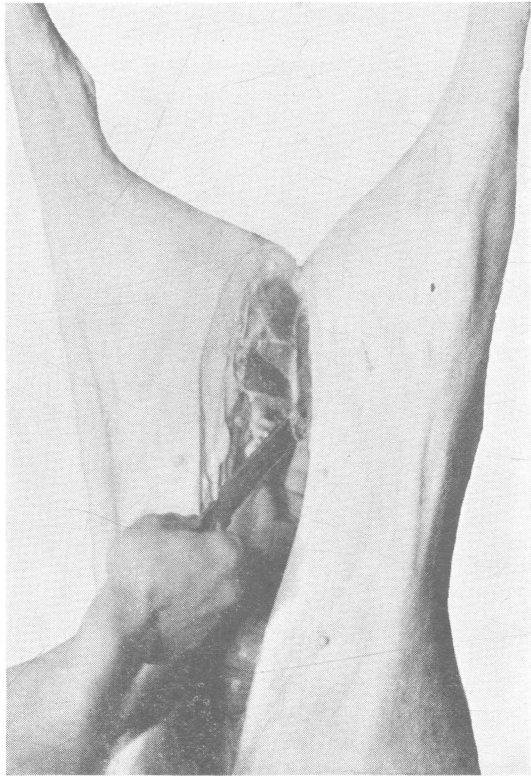


Fig. 5.—Splitting the pelvic or H-bone.

HANGING THE CARCASS

After scraping, the carcass may be hung by using a block and tackle, or may be suspended on a movable tripod as shown in Fig. 4. Final rinsing and scraping may be done after the carcass is lifted.

DRESSING THE CARCASS

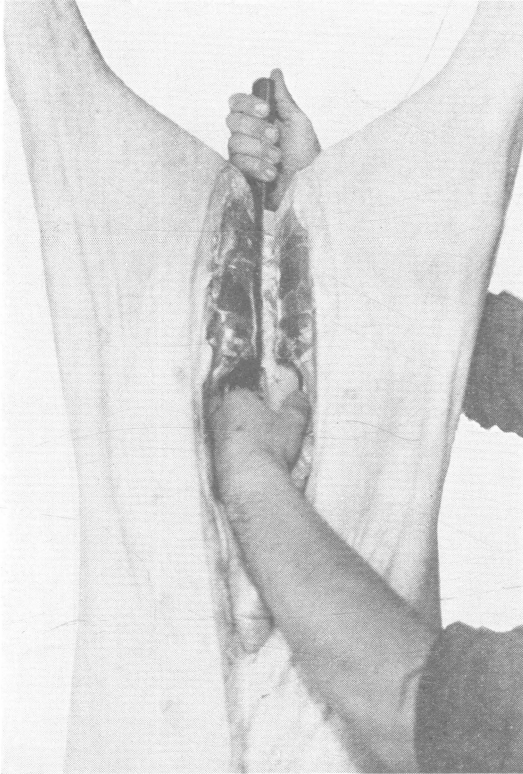


Fig. 6.—Removing the bung.

Make a slight incision down the center of the body from between the hams to the sticking place in the throat, using caution not to cut through the abdominal wall. Insert the knife in the sticking place, cutting edge up, and by an upward pull split the breastbone (see Fig. 4).

In old hogs it may be necessary to make the cut about $\frac{1}{4}$ inch to the side of center, through the softer bone or cartilage. If this fails the saw may be used.

Next, begin at the other end of the incision and cut down the center between the hams. As the hams open up they may be split apart by inserting the knife between the pelvic bones (see Fig. 5). Usually there is

no trouble in this operation, but a saw may be used if necessary. Loosen the bung by cutting on both sides and at the back (see Fig. 6). Pull it down past the kidneys, but be careful to cut it free from the kidney fat.

There are two methods of splitting the abdominal wall. (1) Insert two fingers of the left hand, spread apart, between the wall and the entrails. Then cut down the outside, protecting the entrails with the fingers. Or, (2) insert the knife in the opening as the hams split apart, cutting edge out, and make the cut outward and downward.

Allow the entrails to roll out. Holding the entrails firmly in the left hand, push down slowly but firmly until they loosen from the back. Free

the liver with the right hand and, still holding the entrails, cut through the diaphragm on both sides (see Fig. 7). This will loosen the heart and lungs, and all that is left is to cut the gullet at the throat. The head may be unjointed and removed at this time, or left on until after the carcass is split.

SPLITTING AND CUTTING THE CARCASS

The usual farm method of cutting the carcass is to split it on each side of the backbone. This method may seem preferable for farm use, but splitting or preferably sawing down the center (see Fig. 8) is more satisfactory from the standpoint of really useful cuts, especially if much of the meat is to be sold.

Fist-out the leaf fat, but leave it hanging at the loin end. This is more easily done while the carcass is warm and it facilitates chilling the carcass.

It will also help the hams to cool out by "facing" them. This means to cut back the fat on the inner side of the hams which is ordinarily removed in later trimming.

Allow the carcass to cool out for 18 to 24 hours before cutting it up, as a much more satisfactory job can be done after the meat is thoroughly chilled, but do not allow it to freeze. If for convenience the killing and cutting must be done the same day, do not attempt to start curing before the following day. There is no best method of cutting the carcass, but the method to be used will depend upon individual preference and the intended use to be made of the various pieces.

However, the recommended method of cutting the carcass is as follows: Saw the carcass down through the center of the backbone, as indicated previously. Leave the head on and split with the carcass. Lay the half of the hog on the cutting table, skin side down, and remove the leaf fat.

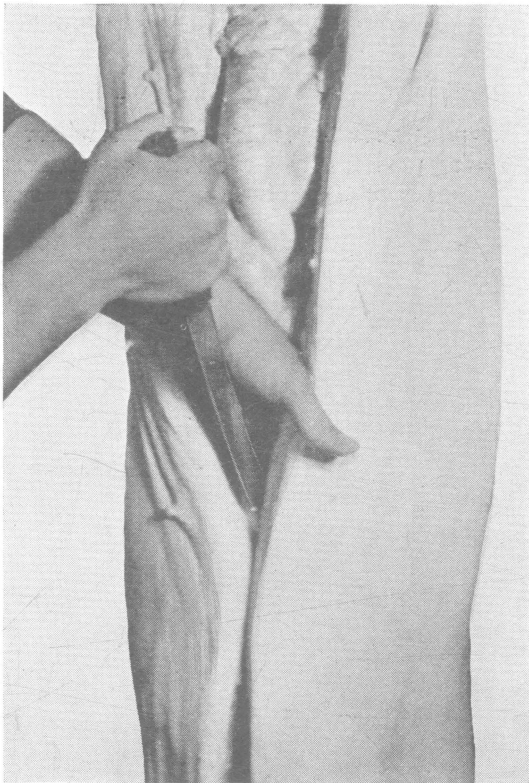


Fig. 7.—Removing the entrails.

Proceed as follows:

1. *Head.* Remove the head portion at the atlas or first joint. Cut off the jowl (No. 1, Fig. 9), trim squarely, and put aside for curing. Trim the rest of head for sausage, head cheese, scrapple, and lard.

2. *Shoulder.* Saw across the third rib parallel to the cut made in removing the head. Remove the neck bones and cut off the shank; the

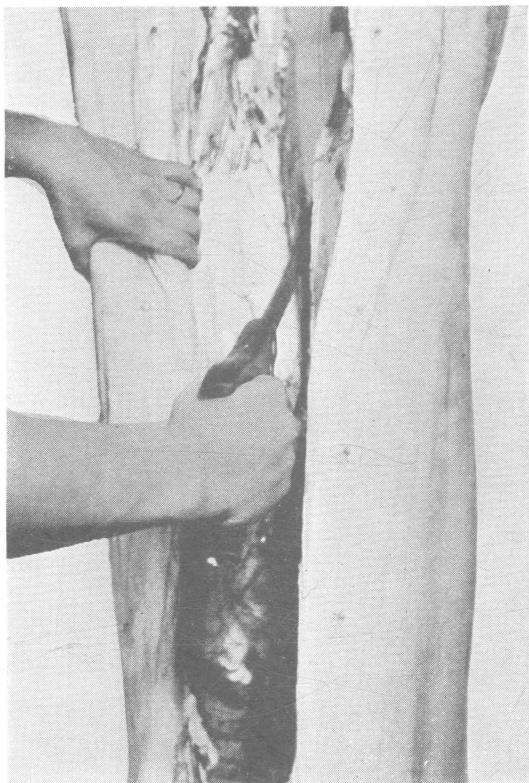


Fig. 8.—Splitting the carcass.

shoulder may then be trimmed neatly and cured if desired. Another way to use the shoulder is to cut off the butt or top of shoulder. Remove the fat for lard and the butt may be used as fresh or canned roast. The remainder of the shoulder known as the picnic or cala may be trimmed and cured, or boned and used for sausage (see Figs. 10-13).

3. *Ham.* Remove the ham by sawing at right angles to the shank at a joint about $1\frac{1}{2}$ inches in front of the pelvic bone. Trim neatly, remove shank, and cure (see Figs. 14 and 15).

4. *Bacon.* Separate the middle into

the back and belly. Begin cutting at the lower edge of the little tenderloin muscle where the ham was cut off, and cut parallel to the back to the lower edge of the backbone at the shoulder end. Remove the spareribs, square up the bacon piece, and cure or use as fresh side (see Figs. 16, 17, and 18).

5. *Loin.* Remove the fat from the back and use for lard. The loin can then be used for roasts or chops, either fresh or canned (see Fig. 19).

With this method of cutting, practically the entire carcass can be cured, as the loin will take a mild cure very satisfactorily. Whatever method of cutting is used, trim the pieces carefully, especially those to be cured. Trim away all flaps and folds, as it is at such places that spoilage most frequently starts.

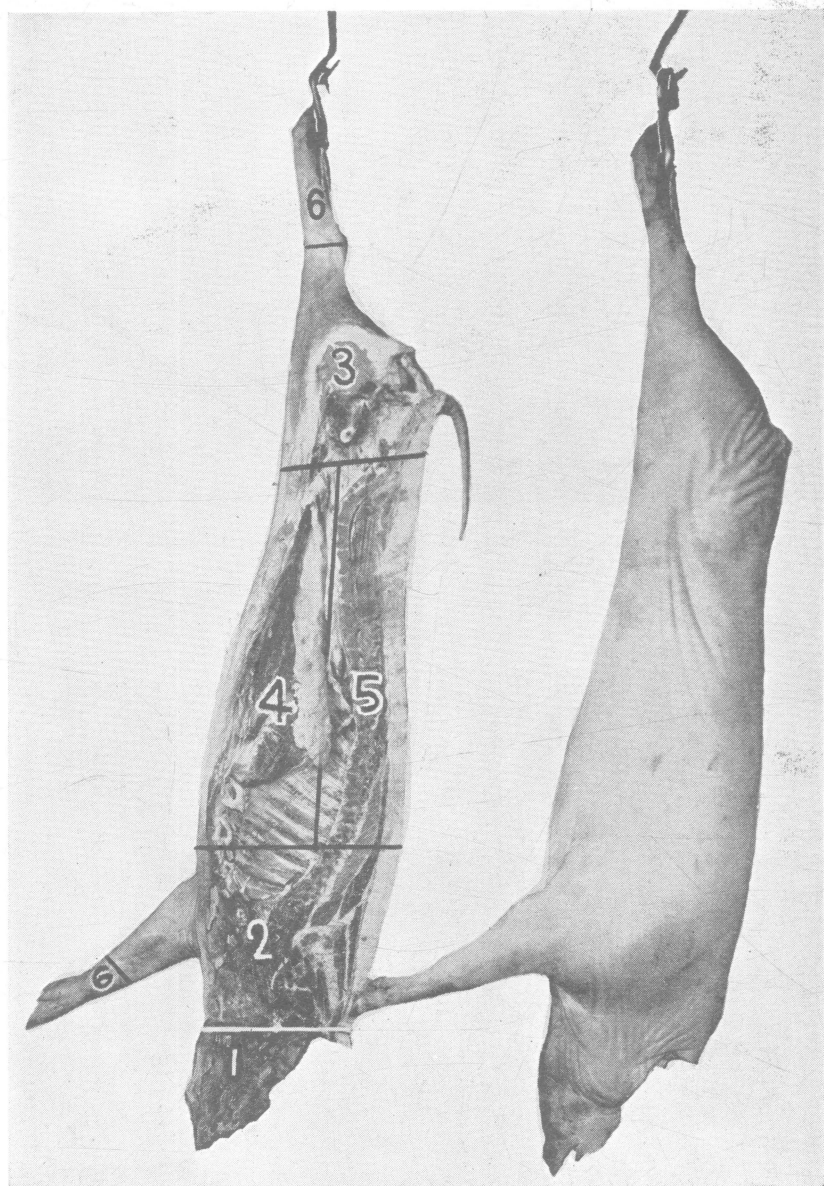


Fig. 9.—The dressed carcass with head removed, left side marked to show division of cuts: 1, jowl; 2, shoulder; 3, ham; 4, bacon; 5, loin; 6, feet.



Fig. 10.—Removing shoulder by sawing the backbone, rib, and breastbone, and completing the cut with a knife.

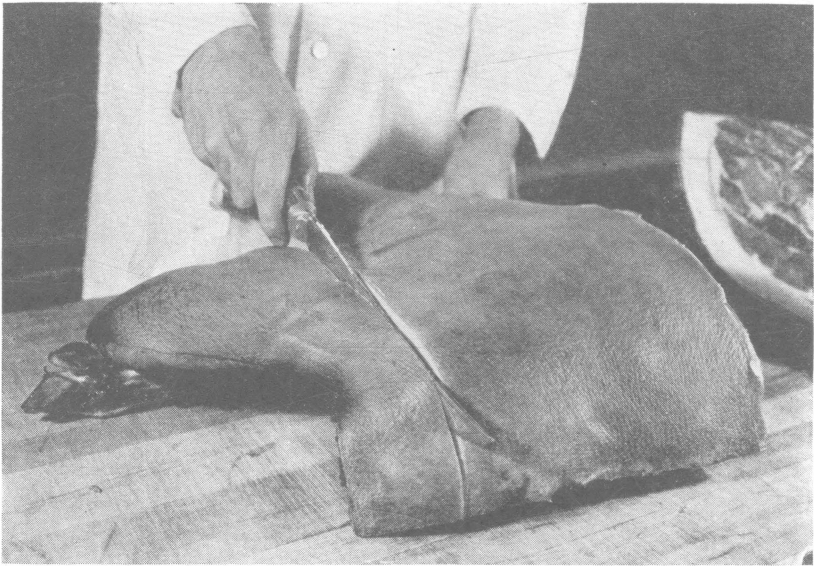


Fig. 11.—Trimming jowl from shoulder.

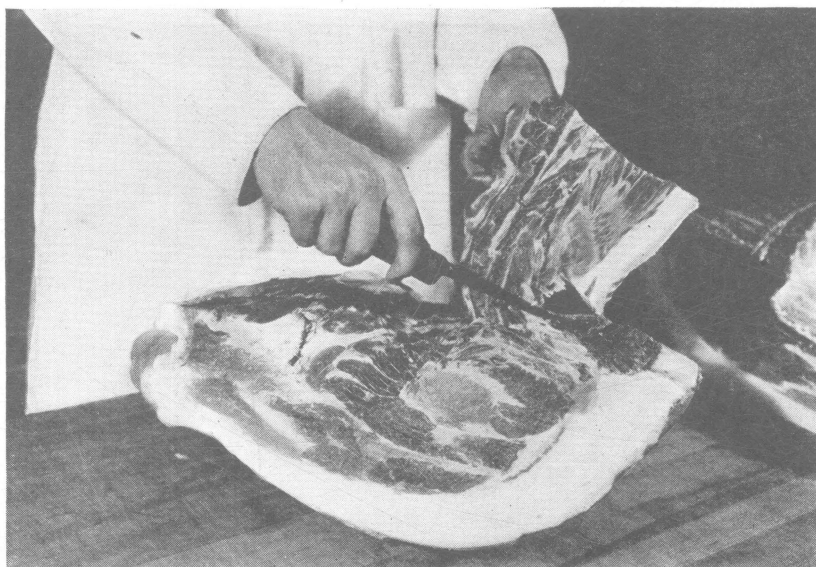


Fig. 12.—Removing neck bones.

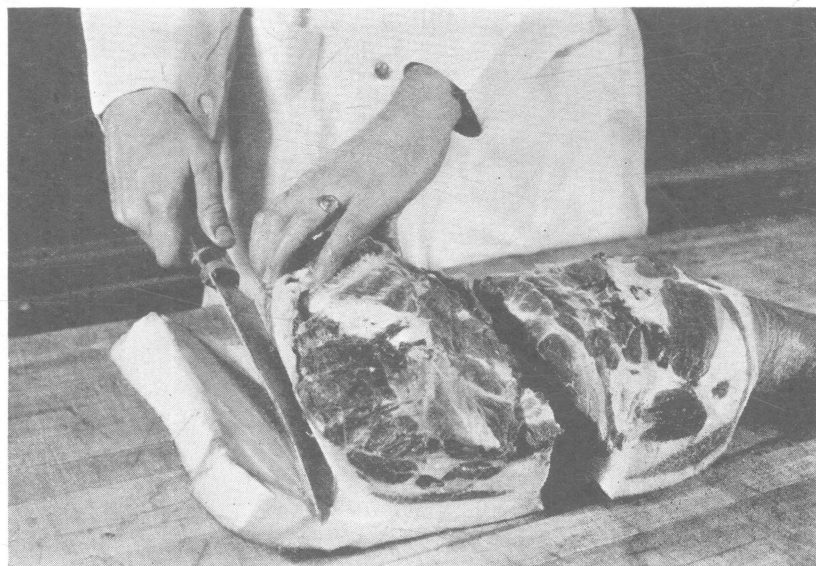


Fig. 13.—After cutting shoulder into fresh picnic and Boston butt, the clear-plate is removed from butt with a knife.

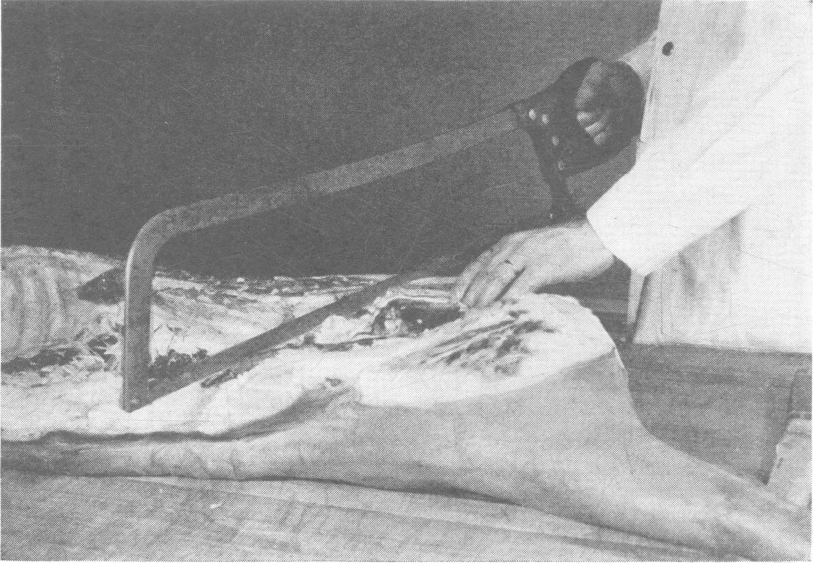


Fig. 14.—Removing ham with saw. The cut should be completed with a knife.

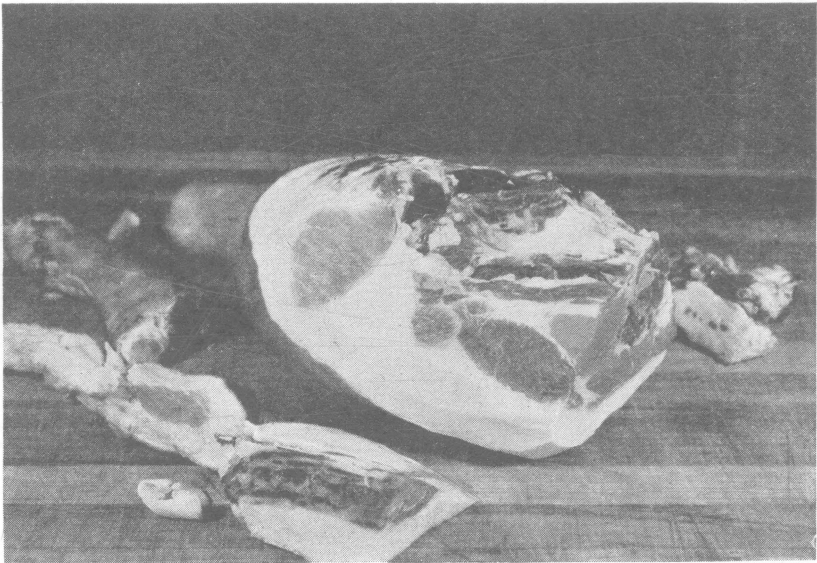


Fig. 15.—Trimmed ham and the parts that have been removed.

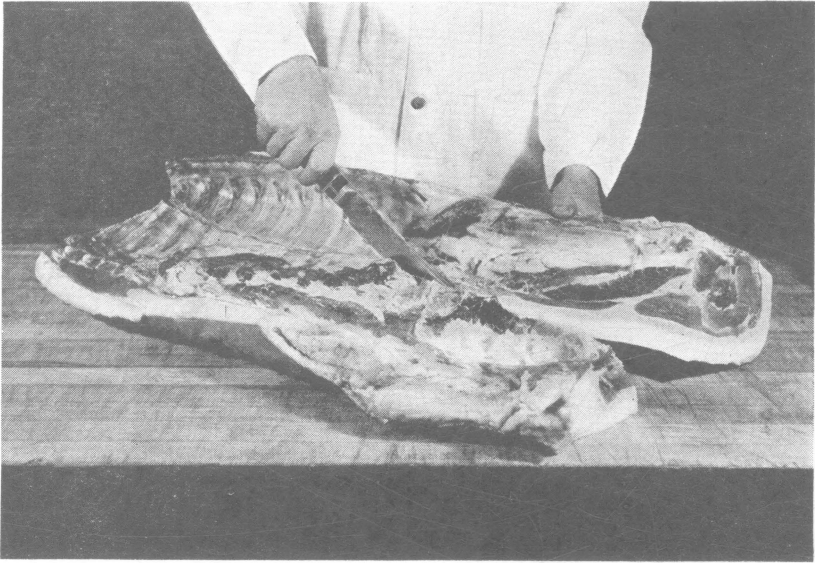


Fig. 16.—Separating loin from the side after having sawed across the ribs.

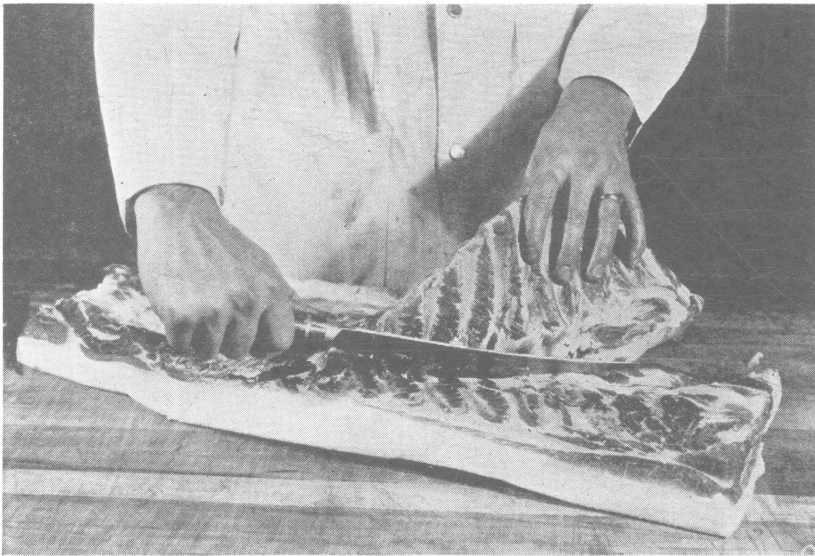


Fig. 17.—Removing spareribs with care, leaving the lean meat on the bacon.



Fig. 18.—Trimming belly in preparation for cure.

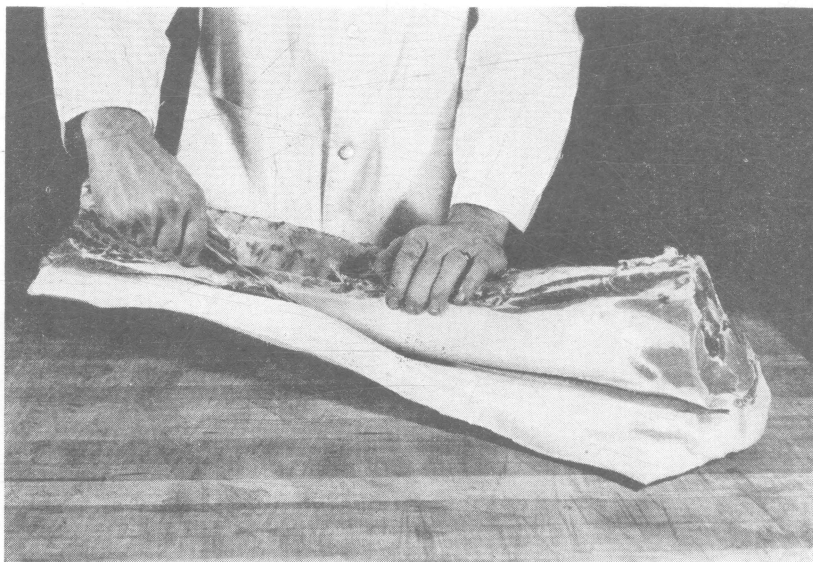


Fig. 19.—Removing fat-back from loin.

CUTTING AND BONING YIELDS OF PORK CARCASSES

Approximate Average from Commercial and Research Reports for
Moderately Fat Hog Weighing about 225 Pounds on Foot.

Cut	PROPORTION OF LIVE WEIGHT PER CENT	PROPORTION OF CUT			WEIGHT YIELDS LBS.
		Lean and Fat Per Cent	Bone Per Cent	Skin Per Cent	
Ham	14	85	10	5	31
Shoulder 3-11b	13	86	9	5	29
Loin	10	80	20		22
Belly (Bacon)	10	92		8	22
Head	7	45	55		15
Spare ribs and neck bones	3	50	50		7
Sausage	4				9
Feet	2				5
Skin from trimmings	2				
Fat	14	80			30
		Rend. lard			Rend. lard
					22-24
					170 lbs. 75% Dr.

* Approximate weight yields from a 225-lb live hog according to cutting method recommended. Yields vary in accordance with the conformation and fitness of the hog and the method used in cutting and boning.

REQUIREMENTS FOR QUALITY IN PORK

The quality of dressed pork is determined by the size, shape, and degree of finish. There is less variation in pork quality than in beef, as a rule. However, as certain features of dressed pork carcasses may affect the intended use, they should very properly be considered.

It has already been mentioned that well fattened hogs weighing from 180 to 225 pounds alive produce the more desired quality and size of pork cuts. These carcasses may be grouped with either the lard-type or bacon-type.

Lard-type includes the short, thick, fat hogs that yield a high percentage of lard, and relatively fat cuts, particularly shoulders, loins, and bellies.

Bacon-type hogs represent the other extreme and are characterized by length of side, the absence of a large, thick covering of back fat on the loin, and a high proportion of lean to fat in the cuts.

Finish.—This may be determined by observing the depth and evenness of fat covering the carcass, especially along the back, as well as the amount and character of the fat on the inside of the carcass. It is understood that the fat be white and firm in character.

Pork Quality.—In its narrow meaning, "quality" refers to firm, bright colored, fine textured flesh, having a clear, smooth, thin, mellow skin free

from wrinkles, blotches, and unsoundness. The head and shanks should be relatively small and fine boned. Soft, red chine bones are preferred, as they indicate that the animal was young. These bones are hard and white in older animals.

The dressed carcass that will grade No. 1 fulfilling requirements for meat and lard from a medium weight live hog should be short shanked and moderately thick and meaty in body. The hams should be plump and meaty so as to yield a greater weight of center cut slices. The sides should be uniformly wide in proportion to length, and even in thickness, especially at the flank and shoulder ends. They should be free of "seeds" which are present in sows and older gilts and necessitate more trimming before curing. The thick side that is well streaked with fat and lean, and is firm, makes a very desirable cured bacon. A covering of fat over the loin $1\frac{1}{4}$ to $1\frac{1}{2}$ inches thick is ample for medium weight carcasses, provided it is uniformly distributed and firm. This requirement is an index to the degree of finish and quality of the other cuts of the carcass.

These items are essentials for the most desirable fresh and cured pork cuts. Most soft pork is undesirable, whether it be the result of lack of finish or the kind of feed. Thin hams, bacon, and loins do not have enough edible meat in proportion to bone and skin to make them useful and economical.

CURING THE MEAT

The curing process is not complicated, except the problem of maintaining fairly even temperatures. The best curing temperature is between 36 and 42 degrees F. If the meat is frozen it will not take the cure, and if the temperature gets much above 40 degrees, the meat is likely to spoil before curing has been thoroughly accomplished. Variations in temperature will also change the quality of the cure from the same recipe.

With any curing recipe, from two to three days per pound per piece will be sufficient for an effective cure. The exact length of time will depend upon the size of the piece, the flavor desired, the temperatures maintained during the process, and the length of time the meat is to be kept before using.

For extremely large pieces of meat or when the meat is to be kept a long time, a brine cure will generally be more satisfactory. However, when the temperature is 45° or higher, the brine itself is very likely to become sour and cause the meat to spoil. Under farm conditions where the pieces to be cured weigh from 12 to 15 pounds, a dry cure will likely give the most satisfactory results.

With any cure, it is very difficult to get satisfactory results with hams which weigh over 20 pounds. Better results with hams of that weight or over will be obtained if they are boned, rolled, and tied before placing in the cure, as it is around the bone that souring or spoiling starts. Souring usually starts at the stifle joint and works along the bone to the center of the ham.

Hams which have started to sour cannot be brought back to sound condition, but, if caught in time, they may be salvaged for immediate use. At the first signs of souring, bone out the piece and parboil it. Then it may be roasted or boiled and, if well seasoned, no sour odor or taste will likely be noticed.

Success in salvaging sour hams will depend on catching the trouble before it is very far advanced.

The exact ingredients in curing recipes may vary a little, due to individual tastes and the season when the meat is finally to be used. Where a saltier flavor is desired, or the meat is in heavy pieces or is to be kept for some time, the amount of salt in the recipe may be increased proportionately. In all recipes, salt is the only real curative agent, and the use of sugar, molasses, and pepper add principally to the flavor. Saltpeter is used to retain the color, but it may add a little to the preserving qualities of the cure.

Dry Sugar Cures.—For each 100 pounds of meat:

Formula No. 1

7 pounds salt
3 pounds brown sugar
2 ounces saltpeter

Formula No. 2

8 pounds salt
2 pounds brown sugar
2 ounces saltpeter

Mix the ingredients thoroughly and rub one-half the mixture into the meat. Pack cuts in stone jars, hardwood barrels, or lay them on a bench or shelf, skin side down. On the seventh day, remove, rub in balance of the mixture and repack. Repack again on the twenty-first day, and at this time remove the bacon or other small pieces from the cure. Each time the meat is repacked, reverse the order of placing the pieces in the curing vessel.

If the temperature is above 45 degrees, it is advisable to push some of the mixture up along the shank bone and into the hip joint where the ham has been cut from the side.

For a mild bacon cure, a dry mixture of 5 pounds salt, 3 pounds brown sugar, and 3 ounces of saltpeter is suggested. The curing time is about 15 days per piece. Average weight loins can be cured the same as the bacon by using fifteen to twenty days as the time limit for curing.

Brine or Sweet Pickle Cures.—For 100 pounds of meat:

Formula No. 1

8 pounds salt
2 pounds sugar or 4 lbs. molasses
2 ounces saltpeter
4½ gallons water

Formula No. 2

12 pounds salt
3 pounds sugar
3 ounces saltpeter
6 gallons water

Mix the dry ingredients thoroughly and rub some into the pieces of meat. Pack in large stone jars or oak barrels with the skin side down, except the top layer, which should have the skin side up. Weight down with hard burned tile or brick, or some hard wood. Do not use limestone or pine wood for weighting down.

Boil the water and while still warm, stir in the ingredients left after rubbing the meat. After the brine has *cooled*, pour over the meat and be sure that each piece is completely covered. In order to insure a uniform cure, the meat should be repacked in about seven days, when the very small pieces may be left out. It should be repacked again in about fifteen days.

At each repacking, the order of placing the pieces in the vessel should be reversed, and care taken to note whether or not the brine has become sour

or ropy. If sour, the brine should be boiled and a little soda added before pouring over the meat again. It would be safer to make new brine, but if this is done the strength of the brine should be reduced somewhat, and the meat not allowed to cure quite as long as when using the same brine for the entire curing process.

Loins, spareribs, and backbones can also be cured with the brine method by dissolving Formula No. 2, suggested for dry curing, in 5½ gallons of cold water which has previously been boiled. Time in the cure for the loins is twenty-one days, for the ribs and backbones, seven days. Give only a light smoke and use before the meat dries out.

SMOKING CURED MEAT

When the curing process is complete, soak the meat for 30 minutes in water at about 95 degrees F. to remove any surplus cure from the surface. Soaking time is dependent upon duration of cure and intentions for immediate or future use. After drying, the meat is then ready to be stored, or smoked, if desired.

Smoking adds to the flavor and helps preserve the meat. For smoking, use green hickory if possible, as it produces the most desired flavor. Apple probably ranks next as a desirable wood for smoking, but maple or any other hard wood will generally give satisfaction. Hang the pieces to be smoked so they do not touch. Slow smoking is better than rapid smoking, and there is less danger of causing the meat to drip. Forty-eight hours of continuous smoking may be enough, but if the meat is to be kept until it is well aged, longer and slower smoking is desirable.

In addition to smoking with wood, there are two types of patent smoke products on the market, liquid smoke or pyroligneous acid, and smoked salt. The use of liquid smoke is not recommended, because it frequently imparts an unsatisfactory flavor, and is a poison. If used, the directions should be *closely followed*. Anyone selling meat containing pyroligneous acid is subject to a heavy fine under the Pure Foods Act.

Smoked salt is finding considerable favor with many users, particularly because of its convenience. However, it is a more expensive cure, and does not add quite so much to the keeping qualities of the meat as the regular smoking process.

STORING CURED MEATS IN SACKS

Where one is troubled with insects getting into the cured meat, some prefer to wrap it in heavy paper and place in heavy muslin or specially prepared sacks, after the meat has been allowed to dry following the curing and smoking process. First, remove the strings used to hang the meat in the smokehouse. In tying the top of the sacks, make a double wrap before tying the knot, as it is quite important to tie the sacks properly in order to keep the insects out. As a further precaution, the sacks may be painted with a "yellow wash" to help protect them from mold and insects. Never stack hams or bacon in a pile after the yellow wash has been applied.

Recipe for Yellow Wash (U.S.D.A.)—For 100 pounds of hams or bacon use:

3 pounds barium sulfate
1 ounce glue (dry)
1 $\frac{1}{4}$ ounces chrome yellow
6 ounces flour

Half fill a 2 $\frac{1}{2}$ -gallon pail with water and mix in the flour, breaking up lumps thoroughly. Mix the chrome yellow in a quart of water in a separate vessel, add the glue, and pour both into the flour-and-water mixture. Bring the whole to a boil and add the barium sulfate slowly, stirring constantly. Make the wash the day before it is required. Stir it frequently while using, and apply with a brush.

PREVENTING MEAT SPOILAGE

Each year much complaint is heard about meat spoilage. A great deal of this spoilage could have been avoided if all of the necessary precautions had been observed from the time of slaughter through the curing process. It might be well to enumerate some of the more important ones again.

1. Slaughter only perfectly healthy hogs.
2. Stick without stunning.
3. Allow the meat to cool out thoroughly, but do not permit it to freeze.
4. Trim away all loose ends and folds from pieces to be cured.
5. Trim out all blood clots (check the shoulders especially).
6. Scald all curing vessels.
7. Cure in a cool place with as near an average temperature of 36 to 42 degrees F. as possible.
8. Boil the water for brine curing.
9. Watch the brine for souring.
10. Repack the meat during the curing process.
11. Store the meat in a cool, dry place.

RENDERING LARD

For best quality of lard the three types of fat—leaf, trimmings, and intestinal—should be rendered separately, but in general practice on the farm, the first two are rendered together. When the leaf fat and fat trimmings are rendered together, it will be better to withhold the leaf fat until the other is partially rendered, as it renders out more quickly. The caul and ruffle fats should always be rendered separately, as they yield a darker product of less satisfactory flavor; or these fats may be used in making soap.

Cut the lard stock into uniform pieces about $1\frac{1}{2}$ inches square or run it through a meat grinder, using a coarse plate. Uniformity in size of pieces will make the rendering more uniform; with both large and small pieces, some will have a tendency to scorch before the others are completely rendered out. Be sure that all the lean meat is trimmed out to prevent scorching. Lard that is scorched will be dark in color and have an unsatisfactory flavor, while lard that is not completely rendered out readily becomes rancid.

At the start of the rendering process, scorching or sticking may be prevented by putting a little water in the rendering kettle before the lard stock is added. Render over a slow fire and stir constantly. As the process continues, the cracklings will float to the top; many persons remove the lard from the fire at this time. However, where lard is to be kept any length of time, it will be better to continue cooking slowly until many of the cracklings have settled to the bottom, as the more complete rendering drives off a greater percentage of the moisture, which reduces the tendency for the lard to become rancid. Be especially careful to keep stirring so that the settled cracklings will not stick and scorch.

When the lard is removed from the fire, it should be allowed to cool before pressing and straining into vessels, as otherwise it might be hot enough to melt the solder of metal containers or crack earthenware ones. By stirring the lard frequently while cooling, a whiter product will be obtained. As soon as the vessels or cans are filled it should be allowed to cool as rapidly as possible for a whiter, more plastic product. After the lard has hardened it is best to store it in a cool, dark place in containers with a tight cover, as this also helps to prevent rancidity.

MAKING SAUSAGE

There are numerous formulas for making fresh pork sausage, depending largely on individual tastes. There are a few fundamental principles, however, which should be followed. The meat should be about three-fourths lean and one-fourth fat, although some recommend that the proportions be two-thirds and one-third. With less than one-fourth fat, the sausage, when cooked, is likely to be dry and unpalatable; with more than one-third fat, it may be too rich or greasy, and the cooking loss will be greater. Usually, parts of the trimmings from the head, neck, shoulder, and side make suitable sausage stock. If too fat, a portion of it may be separated and rendered for lard.

For seasoning, use $1\frac{1}{2}$ ounces of salt, $\frac{1}{2}$ ounce of black or white pepper, and $\frac{1}{4}$ ounce of sage (if desired) to 6 pounds of meat,

Where scales are not available for weighing fractions of an ounce, measure the ingredients for 6 pounds of meat as follows: 9 teaspoons of salt, 3 teaspoons of pepper, and $1\frac{1}{4}$ teaspoons of sage. Use level teaspoons in all cases. Weigh or measure all ingredients; don't guess at it if you want a uniform product.

This formula will produce only a mild seasoning, but it is better to add seasoning to suit after cooking than to have too much at the start. If it is known that the sausage is to be kept fresh for some time, more salt should be added.

Mix the seasoning ingredients thoroughly and spread over the unground meat. Then run through the grinder twice and no further mixing will be necessary. If it is run through the grinder only once, it may be advisable to mix the product a little afterward.

For smoked sausage add about 10 per cent more salt to the seasoning and smoke until a dark mahogany color is obtained.

HEAD CHEESE

Head cheese may be made from the bony pieces, heart, feet, tongues, and other trimmings. Where any part of the head or feet are used, be sure they are thoroughly cleaned.

Boil the material until the meat loosens from the bones. Strain out all solid material from the broth, remove the bones, season the meat to taste, grind, and pack in shallow pans to cool. Head cheese may be stuffed into various types of casings, if desired.

SCRAPPLE

Skim off the surplus grease from the broth in which the head cheese was made. To the boiling broth, stir in cornmeal or a cereal mixture to suit until it is the consistency of thin mush. Some persons like to add a small amount of the meat used in making head cheese. Season to taste.

Allow the mixture to boil for 15 minutes, then cook it slowly for about an hour. Stir frequently, especially at first, to prevent sticking. When it is thoroughly cooked, pour into shallow pans and allow to cool. When cool, it may be sliced and fried as ordinary mush.

For methods of canning meat, refer to "Home Canning for Better Family Meals," Agricultural Extension Bulletin 104, The Ohio State University.

THE OHIO STATE UNIVERSITY
Cooperating with
THE UNITED STATES DEPARTMENT
OF AGRICULTURE



AGRICULTURAL EXTENSION SERVICE

H. C. RAMSOWER, Director
Columbus, Ohio



Printed in furtherance of the Agricultural
Extension Act Approved by Congress
May 8 and June 30, 1914